

Work Order ID 107159

September-23-13 11:10:07 AM

107159

Page 1

Item ID: D4034-043

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fwd Upper Rib Assembly

Start Date: 10/02/13 **Start Qty:** 3.00

~~*3*~~ 4X

Cust Item ID:

Required Date: 10/02/13 **Req'd Qty:** 3.00

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 13-09-24 Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--	----------------------------------	------------------------------	----------------	---------------	----------------------	-----------------------	-----------------------	--------------------------	------------------------

Draw Nbr	Revision Nbr
D4034	C ✓

100 Weld per dwg A/R S.S. rod Batch: M103823 0.00

100

Large Fab

Large Fab

Memo

0.00

1- Assemble ribs to hoop and weld as per dwg DT9564

2- Weld bushing in rib as per dwg

4X 13-10-08

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

PC 13.10.09

110

QC

Quality Control

Memo

0.00

4X

120

QC5- Inspect part completeness to step on W/O

0.00

PC 13.10.09

120

QC

Quality Control

0.00

4X

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
			Work Order Update <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Large Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
						Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear	General										
	<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced						
	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure						
	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld						
	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled						
	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved							
	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong							
	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge							
	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Other							
	<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration								
	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence								
	<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions								

Work Order ID 107159

107159

Page 2

September-23-13 11:10:07 AM

Item ID: D4034-043

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fwd Upper Rib Assembly

Start Date: 10/02/13 **Start Qty:** 3.00

~~*3*~~ 4
~~*3*~~

Cust Item ID:

Required Date: 10/02/13 **Req'd Qty:** 3.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

130

130

Packaging

Packaging

Identify as per dwg & Stock Location: W14

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

0.00

(PCL 13.10.09)

fx

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

JJ/km 13/10/09.

11/13-10-9

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS											
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>									
Part No. _____		NCR No. _____														
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector							
Doc/Data																
Equip/Tooling																
Operator																
Material																
Setup																
Other																
Process																
Supplier																
Training																
Unapproved																
FAULT CATEGORY																
Landing Gear	<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled			

Picklist Print

September-23-13 11:10:06 AM

Page 1 /2

Work Order ID:	107159	Start Date:	10/02/13	Required Date:	10/02/13
Parent Item:	D4034-043	Start Qty:	3.00	Required Qty:	3.00
Parent Item Name:	Fwd Upper Rib Assembly				
Comments:	IPP RevA: new issue DD 09.11.23 verified by:EC IPP Rev:B as per dwg revA 10.03.15 verified by:EC IPP Rev:C 11.01.19 AS PER DWG REV.B DD VERF:EC IPP Rev:D 13.03.14 AS PER DWG REV.pc1 DD VERF:JLM IPP REV:E 13.06.21 DWG REV.C DD VERF:JFS				

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4021-7 Hoop		Manufactured	No			100	Each	9.0000	1	3		Sy 13 - 10 - 08	
				<u>Location</u>		<u>Loc Qty</u>			<u>Loc Code</u>				
				WA004		9							
				103582		2							
				105882		4							
				88428		3							
D4021-9 Bushing		Manufactured	No			100	Each	213.0000	4	12		Sy 13 - 10 - 08	
				<u>Location</u>		<u>Loc Qty</u>			<u>Loc Code</u>				
				WA002		6							
				102482		4							
				99143		2							
				WA004		207							
				100402		3							
				100917		12							
				102664		50							
				106377		15							
				106513		67							
				66437		2							
				70333		4							
				72482		4							
				82977		1							
				84717		3							
				88077		23							
				88377		7							
				92020		12							
				98877		4							

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ **Date:** _____

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Part No. _____		NCR No. _____									
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset	Other								
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

Picklist Print

September-23-13 11:10:07 AM

Page 2

Work Order ID: 107159

Parent Item: D4034-043

Parent Item Name: Fwd Upper Rib Assembly

Start Date: 10/02/13

Required Date: 10/02/13

Start Qty: 3.00

Required Qty: 3.00

D4034-1

Manufactured

No

100

Each

9.0000

1

B104371 → 3x 13.10.08

Rib

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA004	9	
103359	1	
104626	5	
83755	1	
89359	1	
97591	1	

D4034-3

Manufactured

No

100

Each

13.0000

1

3 13.10.08

Rib

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	7	
104342	7	4X
WA004	1	
101014	1	
WA005	5	
104604	3	
94179	2	

NCR: Yes / No

DQA: _____ Date: _____

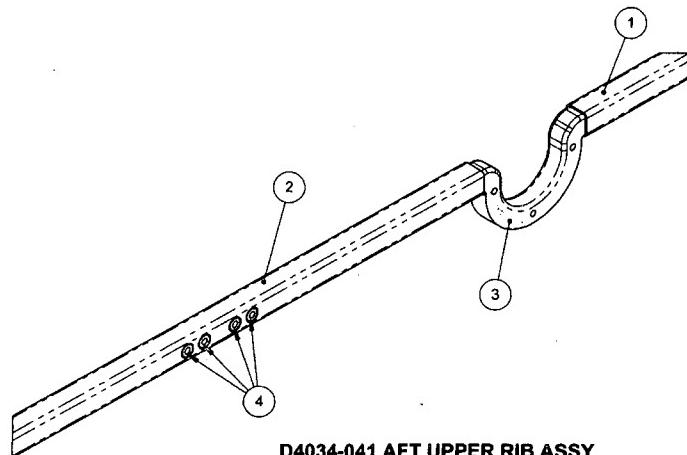
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

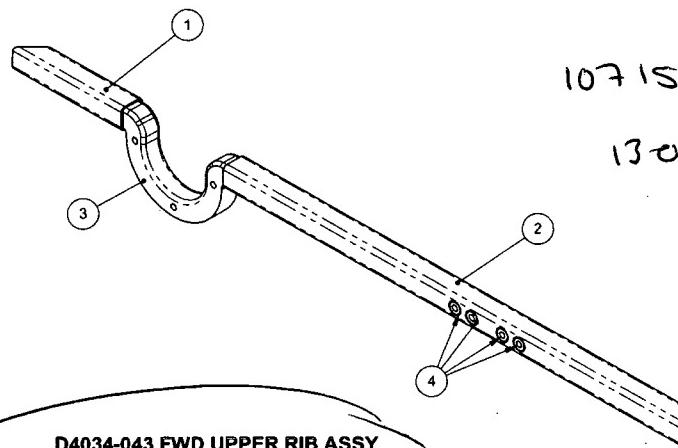
Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS															
			Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/>	Quality <input type="checkbox"/>	Other <input type="checkbox"/>
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector										
Doc/Data																					
Equip/Tooling																					
Operator																					
Material																					
Setup																					
Other																					
Process																					
Supplier																					
Training																					
Unapproved																					
FAULT CATEGORY																					
Landing Gear	General																				
	Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced	<input type="checkbox"/>	Temperature/Cure	<input type="checkbox"/>									
	Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Weld	<input type="checkbox"/>	Wrong Stock Pulled	<input type="checkbox"/>									
	Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Other	<input type="checkbox"/>											
	Crushed/Crimped	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>		<input type="checkbox"/>											
	Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>		<input type="checkbox"/>											
	Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>		<input type="checkbox"/>											
	Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>		<input type="checkbox"/>											
	Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>											
	Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>											
	Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>											
	Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>											

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4034-041	AFT UPPER RIB ASSY
		X	D4034-043	FWD UPPER RIB ASSY
1	1	1	D4034-1	RIB
2	1	1	D4034-3	RIB
3	1	1	D4021-7	HOOP
4	4	4	D4021-9	BUSHING

C



D4034-041 AFT UPPER RIB ASSY



D4034-043 FWD UPPER RIB ASSY

107159
MLJ
13-09-24

RELEASED
2013-06-20
M

C	D403 REDESIGNED AS MIRROR IMAGE OF J-041. -5 DELETED. D2327-3 DELETED. REASON PROP ARM NO LONGER OFFERED.		AJS	13.03.13
B	ADDITIONAL HOLES ADDED ON D4034-3 RIB		SC	10.12.20
A	NEW ISSUE		AJS	10.03.04
REV.	DESCRIPTION			
	DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AJS	DRAWING NO.	REV. C
	CHECKED	A.P.	D4034	SHEET 1 OF 3
	MFG. APPR.	A.P.	TITLE	SCALE
	APPROVED	A.P.	UPPER RIB ASSY, BASKET BASE	NTS
	DE APPR.	A.P.	DATE	13.03.13

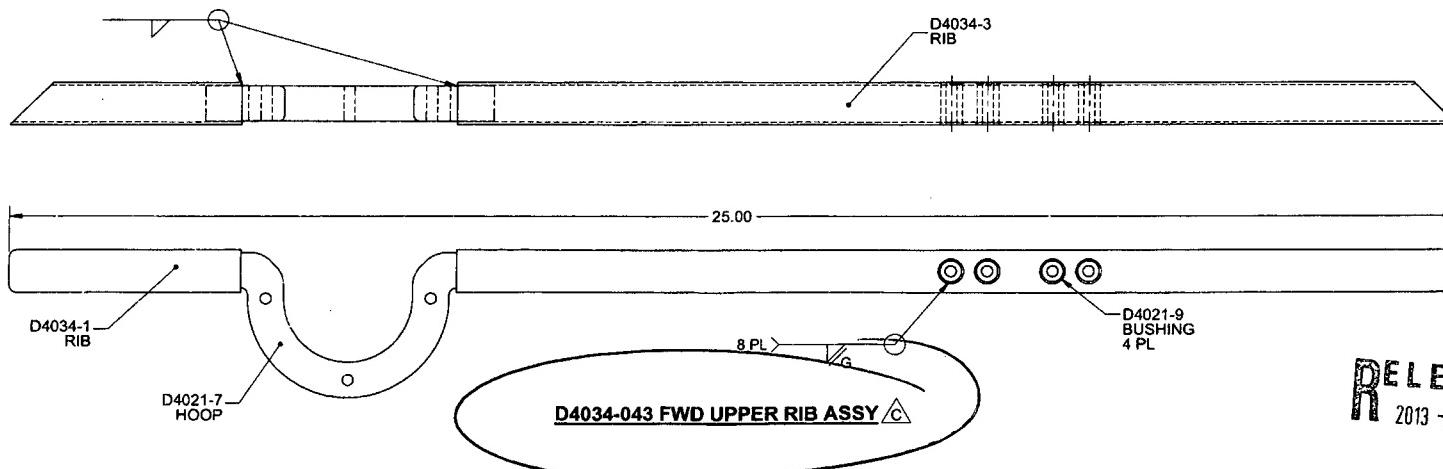
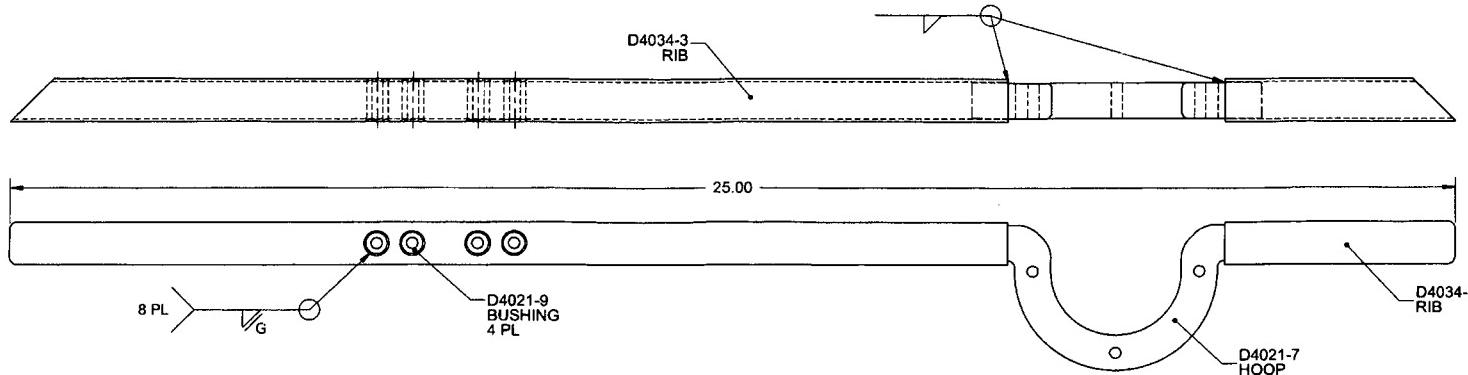
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8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

107159

8 7 6 5 4 3 2 1



A

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.61 lbs
- 8) WELD PER DART QSI 004

8 7 6 5 4 3 2 1

DESIGN	AJS	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>AP</i>	DRAWING NO.
MFG. APPR.	<i>AS</i>	REV. C
APPROVED	<i>AP</i>	D4034
DE APPR.	<i>AP</i>	SHEET 2 OF 3
DATE	13.03.13	TITLE
		SCALE
		NTS
		UPPER RIB ASSY, BASKET BASE

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RELEASED
2013-06-20
MP

107159

